

Appn No. 09/575,163
Amdt. Dated June 15, 2004
Response to Office action of March 02, 2004

4

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for transferring data from a portable data capturing device to a data processing means, the system comprising:

a wireless communications means for transmitting data from said data capturing device to the data processing means, the wireless communications means comprising a transmitter in communication with said data capturing device and a receiver in communication with the data ~~storage-processing~~ means, the transmitter having a finite transmission range; and

A3 a buffer in communication with said data capturing device for temporarily storing at least some of the data captured by the said data capturing device,

wherein data which is temporarily stored in the buffer is only transmitted to the receiver when the receiver is located within the transmission range of the transmitter, and when a force sensing means provided in the data capturing device senses that contact between the data capturing device and a surface has been broken.

2. (Original) The system according to claim 1, wherein the buffer has a finite buffer storage capacity, the arrangement being such that when the buffer is filled to storage capacity, the data capturing means ceases capturing data.

3. (Original) The system according to claim 2, wherein an alarm signal is generated to alert a user when the buffer is filled to storage capacity.

4. (Original) The system according to claim 1, further comprising a range detection means for detecting when the receiver is out of transmission range of the transmitter.

5. (Original) The system according to claim 1, further comprising a controller for controlling operation of the buffer and the transmitter.

82

A

Appln No. 09/575,163
Amdt. Dated June 15, 2004
Response to Office action of March 02, 2004

5

6. (Original) The system according to claim 1, further comprising an out-of-range indicator at the location of the data capturing device for indicating to a user when the receiver is outside the transmission range.

7. (Original) The system according to claim 1, further comprising an encryption means for encrypting data before the data is transmitted.

8. (Original) The system according to claim 1, wherein said data capturing device is adapted to capture coded data recorded on a surface.

A3
Cmt
9. (Original) The system according to claim 8, wherein the coded data is optically encoded on the surface.

10. (Original) The system according to claim 9, wherein the data capturing device comprises a sensing device for sensing region identity data and generating movement data when the sensing device is moved relative to a region of a surface, the region identity data being indicative of an identity of the region, the movement data being indicative of the movement of the sensing device relative to the region, the surface having disposed upon it coded data indicative of at least one region associated with the surface, the sensing device including:

region identity sensing means configured to sense the region identity data using at least some of the coded data;

motion sensing means configured to generate the movement data; and

communications means configured to communicate the region identity data and the movement data to a computer system.

11. (Currently Amended) A ~~sensing device system~~ according to claim 10, wherein the motion sensing means is configured to generate the movement data using at least some of the coded data.

R3

A

Appln No. 09/575,163
Amdt. Dated June 15, 2004
Response to Office action of March 02, 2004

6

12. (Currently Amended) A ~~sensing device~~system according to claim 11, wherein the coded data is also indicative of a plurality of reference points of the region, the motion sensing means being configured to generate the movement data on the basis of the sensing device's movement relative to at least one of the reference points.

13. (Currently Amended) A ~~sensing device~~system according to claim 12, wherein the coded data includes periodic elements, the motion sensing means being configured to generate the movement data on the basis of the sensing device's movement relative to at least one of the periodic elements.

A3
cont
14. (Currently Amended) A ~~sensing device~~system according to claims 12 or 13, wherein the motion sensing means is configured to sample the position of the sensing device relative to the at least one reference point or periodic element, thereby to generate the movement data.

15. (Currently Amended) A ~~sensing device~~system according to claim 10, wherein the movement sensing means includes at least one acceleration sensing means, the acceleration sensing means being configured to sense acceleration of the sensing device as it is moved relative to the surface region, the movement sensing means being configured to generate the movement data by periodically sampling the acceleration.

16. (Currently Amended) A ~~sensing device~~system according to claim 10, wherein the sensing device is in the form of a stylus or pen.

17. (Currently Amended) A ~~sensing device~~system according to claim 10, further including a force sensing means configured to sense a force applied to a surface by the sensing device, and for providing force data corresponding to the force applied.

[18. (Cancelled)

84

A

Appln No. 09/575,163

Amdt. Dated June 15, 2004

Response to Office action of March 02, 2004

7

18
19. (Currently Amended) A method of transferring data from a portable data capturing device to a data processing means, the method comprising the steps of transmitting data from said data capturing device to a receiver in communication with the data processing means via a wireless communications means; ~~when the receiver is within a finite transmission range, and buffering at least some of the data captured by said data capturing device; and, when the receiver is outside the finite transmission range~~ transmitting buffered data from the data capturing device to the receiver when the receiver is within the transmission range and when contact between the data capturing device and a surface is broken.

85

A